June 21, 2011 Water Supply Forecast Discussion

We've finished the June 21, 2011 Bulletin 120 Update, and it is posted at http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up. This forecast includes observed conditions through the morning of June 21, 2011.

Forecast Summary:

The projected median April-July runoff now ranges from 143 percent (Shasta Lake, Total Inflow) to 193 percent (Kern River). Most forecasts were decreased slightly or remained the same compared to last week's forecast. However, the Kings was raised by 30 TAF after revaluating flows to date and historical runoff patterns.

Runoff:

For all forecasted rivers, the flow rates through June 21 are greater than a 174 percent of average. These flows have increased from last week due to the warmer and more seasonal temperatures. Inflow into Shasta River had the lowest percent of average, 174 and Yuba at Smartsville had the greatest percent of average, 285. Meanwhile the Cosumnes (which was not forecasted), is flowing at 372 percent of average, which is a 22 percent decrease since last week.

Precipitation:

Since June 14, 2011 there have been no gains in precipitation for both the Northern Sierra 8-Station Index and San Joaquin 5-Station Index. The seasonal total is now 71.1 inches (142 percent of an average water year) for the Northern Sierra 8-Station Index and 62.6 inches (153 percent of an average water year) for the San Joaquin 5-Station Index.

Snowpack:

The sensors continue to indicate substantial snow cover area, (above 8500 feet from the Mokelumne River southward) despite passing through the Summer Solstice of June 21, 2011, which is the day with the greatest duration of daylight during the year. The snow sensor data for the morning of June 21, 2011 indicated the statewide snowpack is 39 percent (11 inches) of the April 1 average. Since June 1, the statewide snowpack has lost 16 inches of snow.

Weather and Climate Outlooks:

The weather forecast for the next six days indicates no precipitation anywhere in the state. During this time period the freezing levels in the Sierra will be within the range of 13,000 to 16,000 feet.

The Climate Prediction Center's (CPC) six to ten day outlook (6/29/11-7/3/11) indicates below normal temperatures for the northern two thirds of California and normal temperatures for the rest of the state. During this same period, there is an above normal chance of precipitation in the far northwest corner of the state and increased chances of below normal precipitation for the central and southern Sierra.

The CPC's one-month outlook for July, updated on June 16, suggests equal chances of above and below normal temperatures and precipitation for all of California.

The CPC's three-month outlook (July-September, updated June 16) suggests equal chances of above and below normal temperatures for California except for the Mojave Desert and Colorado River regions,

where above average temperatures are forecasted. The same outlook suggests equal chances of above and below normal precipitation for the state except for the far northern portion of the state, where below normal precipitation is expected.

Next Update:

The next Bulletin 120 Forecast update will be produced for conditions on June 28, 2011, and will be available by Thursday, June 30, 2011. If you need guidance before then, or have any questions, please contact us:

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Important Links

Full Natural Flow Data:

Daily FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FNF

Monthly FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey ro/FNFSUM

Seasonal FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FLOWOUT

Precipitation Data:

Northern Sierra 8-Station Precipitation Tabulation Table
http://cdec.water.ca.gov/cgi-progs/products/8-Stations Tab.pdf
San Joaquin 5-Station Precipitation Tabulation Table
http://cdec.water.ca.gov/cgi-progs/products/5-Stations Tab.pdf
2011 WY Precipitation Summary
http://cdec.water.ca.gov/cgi-progs/precip/PRECIPSUM

Snow Data:

Latest Snow Sensor Report
http://cdec.water.ca.gov/cgi-progs/snow/PAGE6
Latest Statewide Summary of Snow Water Equivalents
http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ
Monthly Snow Course Report
http://cdec.water.ca.gov/cgi-progs/snow/COURSES

California Nevada River Forecast Center Snow Melt Guidance Products:

Snow Data and Spring Seasonal Runoff Forecasts http://www.cnrfc.noaa.gov/snowmelt.php
20-Day Snowmelt Guidance (Raw Model Output) http://www.cnrfc.noaa.gov/awipsProducts/RNOHFSESP.php
Peak 1-Day Stream flow Volume and Date Forecast http://www.cnrfc.noaa.gov/awipsProducts/RNOHFSSPK.php

Extended Regional Forecasts:

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast

http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php

Climate Prediction Center 6-10 Day Outlook Forecasts

http://www.cpc.ncep.noaa.gov/products/predictions/610day/

Climate Prediction Center One-Month Outlook Forecasts

http://www.cpc.noaa.gov/products/predictions/30day/

Climate Prediction Center Three-Month Outlook Forecasts

http://www.cpc.noaa.gov/products/predictions/90day/